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ABSTRACT

This report offers comprehensive descriptions of students entering each of the five teacher education programs at Michigan State University during the 1985-86 academic year. Summaries are presented of the programs: (1) Standard Program; (2) Academic Learning Program; (3) Heterogeneous Classrooms Program; (4) Learning Community Program; and (5) Multiple Perspectives Program. The entry questionnaire is divided into six units: (1) general background of the respondents; (2) high school background; (3) college background; (4) career orientations; (5) general orientation to teaching; and (6) educational beliefs. These units provide the outline for the presentation of the findings in Section I of this report. Section II reports subpopulation contrasts by: (1) elementary/secondary contrasts; (2) program affiliation contrasts; (3) gender contrasts; and (4) pre/post baccalaureate contrasts. Student responses to the survey questionnaire are displayed on tables with accompanying narrative discussion. Appended are responses to statements reflecting four clusters of educational beliefs: teacher expectations; classroom management/social context; curriculum planning and policy; and teacher responsibilities. (JD)

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# Research and Evaluation in Teacher Education

Program Evaluation Series No. 12

PROFILES OF ENTERING  
MICHIGAN STATE UNIVERSITY  
TEACHER EDUCATION STUDENTS  
1985-1986 Academic year  
Brad West



Department of Teacher Education  
and  
Office of Program Evaluation

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MICHIGAN STATE UNIVERSITY  
TEACHER EDUCATION STUDENTS  
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Brad West  
East Lansing, Michigan  
Fall, 1986

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PROFILES OF ENTERING  
MICHIGAN STATE UNIVERSITY  
TEACHER EDUCATION STUDENTS

1985 - 1986 Academic Year

General Background	High School Background	College Background
Career Plans	General Orientation to Teaching	Educational Beliefs

**INTRODUCTION** In 1981, Michigan State introduced four teacher preparation programs as alternatives to the Standard Program. Soon after the new alternatives were introduced, the Undergraduate Program Evaluation Committee was created. Its central purpose is to provide continuity in the evaluation of undergraduate programs.

A basic question that drives program evaluation at the undergraduate level is, "HOW DO STUDENTS CHANGE AS THEY PROGRESS THROUGH EACH OF THE FIVE UNDERGRADUATE TEACHER PREPARATION PROGRAMS?" What changes occur between program entry and exit? Do changes in student outcomes vary in predictable ways as a function of the program? Do these changes endure over time? The purpose of this report is to provide comprehensive descriptions of students entering each of the five programs during the 1985-1986 academic year.

**THE INSTRUMENTS** Data collection is based primarily on instruments developed by Don Freeman and the Undergraduate Program Evaluation Committee to provide a common, comparative baseline for interpreting results for each program. Presently, the set of common instruments includes three questionnaire surveys (entering, exit, and follow-up) and two interview schedules, (entry and exit). The entry questionnaire, which is the focus of this report, is divided into six units: (1) General Background of the Respondents, (2) High School Background, (3) College Background, (4) Career Orientations, (5) General Orientation to Teaching, and (6) Educational Beliefs. These units provide the outline for the presentation of the findings in Section I of this report. Section II reports subpopulation contrasts by (1) Elementary/Secondary Contrasts, (2) Program Affiliation Contrasts, (3) Gender Contrasts, and (4) Pre/Post E.A. Contrasts.

**THE DESIGNATED POPULATION** The undergraduate program evaluation plan is on a three year cycle. Students who enrolled in TE 200 during the 1985-1986 academic year serve as the designated population for CYCLE 1; students who enroll in TE 200 during the 1988-1989 academic year will constitute the population for CYCLE 2, etc. Students in the designated population complete four questionnaires: entry, exit, short-term follow-up and long-term follow-up. Also, a randomly selected sample of each population will be asked to participate in three interviews: entry, exit, and follow-up. (For additional details of the overall program evaluation effort in the College of Education, see Freeman, 1986).

CYCLE 1 ENTRY DATA

YEAR is a comprehensive report of the CYCLE 1 entry questionnaire administered to students during their first week of enrollment in TE 200 in the 1985-1986 academic year. TE 200--Individual and the School--is the first professional education course required of both elementary and secondary majors. Elementary majors will have completed TE 101--Exploring Teaching--prior to TE 200 and students generally select their program during or after TE 101, based on program orientation sessions. This data serves as the comparative base for interpreting results of future data gathering activities involving this group of students.

As mentioned earlier, teacher education undergraduates may participate in one of four alternative programs to the Standard Program. These programs and their respective focal points are briefly summarized as follows:

THE STANDARD PROGRAM:

The elementary and secondary teacher certification program in which the largest number of students participate.

The curriculum includes course work in educational psychology, foundations of education, methods of teaching the various subjects and field/laboratory experiences.

THE ACADEMIC LEARNING PROGRAM:

An alternative certification program for elementary and selected fields of secondary education. Focuses on the academic/intellectual underpinnings of particular disciplines. Emphasis is on how subject matter is learned and how to analyze/adapt curricula in view of their educational, social, and psychological foundations.

THE HETEROGENEOUS CLASSROOMS PROGRAM: An alternative certification program for elementary majors. Focuses on the wide range of individual and group needs in the typical diverse classroom. Emphasis is on the nature and origin of differences and the implications for effective teaching.

THE LEARNING COMMUNITY PROGRAM:

An alternative certification program for elementary education majors which focuses on the need to promote personal and social responsibility among students. The program emphasizes creating opportunities for personal and cooperative classroom learning to develop a sense of community in a classroom.

THE MULTIPLE PERSPECTIVES PROGRAM:

This is an alternative certification program for elementary and secondary majors. Emphasis is on teacher decision making with attention to decisions regarding individual differences, instruction and instructional design, and group interaction. The program focuses on in-depth study of the multiple functions of schools in today's society.

### ORGANIZATION OF THIS REPORT

This report of the CYCLE 1 entry data is organized into two major sections:

#### SECTION I. Population percentages and frequency counts

- A. General Background
- B. High School Background
- C. College Background
- D. Career Plans
- E. General Orientation to Teaching
- F. Educational Beliefs
- G. Summary

#### SECTION II. Subpopulation Contrasts :

- A. Elementary/Secondary Contrasts
- B. Program Affiliation Contrasts
  - 1. Heterogeneous Classrooms
  - 2. Learning Community
  - 3. Academic Learning
  - 4. Multiple Perspectives
  - 5. Standard Program
- C. Gender Contrasts
- D. Pre/Post B.A. Contrasts

There were 802 students enrolled in Ed 200 during the 1985-1986 academic year and useable questionnaires were returned by 545 respondents (67% return rate) although not all respondents replied to every question. Percentages in the following table and for each subsequent question were adjusted for the total responding to each question.

Table I

Number of Program Respondents

Standard Program	349	( 64%)
Academic Learning	46	( 9%)
Heterogeneous Classrooms	25	( 5%)
Learning Community	35	( 6%)
Multiple Perspectives	87	( 16%)
No Program Designation	3	
	<hr/>	
	545	(100%)

SECTION I. POPULATION PERCENTAGES AND FREQUENCY COUNTS

A. GENERAL BACKGROUND OF THE RESPONDENTS

		<u>percent</u>	<u>frequency</u>
The respondents were primarily	female	76%	414
	caucasian	96%	515
	under 22 years old	64%	346
	came from families with three or more children	78%	423
	and expect to study for advanced degree	57%	311
The respondents' mothers	had some study beyond high school	59%	312
	and a college degree	35%	186
	and an advanced degree	11%	57
The respondents' fathers	had some study beyond high school	70%	378
	and a college degree	50%	274
	and an advanced degree	25%	134
When the respondents were in high school, their mothers	were homemakers	42%	225
	or white/blue collar workers	41%	221
	or in the education profession	13%	71
and their fathers were	white collar workers	57%	307
	or blue collar workers	29%	154
	or in the education profession	8%	45

		<u>percent</u>	<u>frequency</u>
Family income when respondents graduated from high school was	less than \$20,000 or between \$20,000 and \$35,000 or between \$35,000 and \$50,000 or over \$50,000 or respondent did not know	11% 25% 25% 22% 17%	58 129 131 114 92
At the time of the survey, the respondents worked	20 hours or less each week between 21 and 30 hours each week or more than 30 hours each week or did no work at all	44% 11% 5% 40%	237 61 29 214
Besides working, respondents did volunteer (community) work	one to five hours each week or 6 or more hours each week or none at all	22% 5% 73%	118 29 391
During a typical week, respondents report studying	less than 10 hours 10-15 hours 16-20 hours 21-25 hours or more than 25 hours	10% 28% 31% 19% 12%	54 154 169 101 64

## B. HIGH SCHOOL BACKGROUND AND ACTIVITIES

Respondents graduated from high schools that had

less than 100 seniors	15%	87
101-300 seniors	40%	214
300 or more seniors	44%	241

and may be classified as

suburban high schools	53%	287
rural high schools	28%	154
urban/inner city schools	19%	101

Eighty-eight percent (478) attended public high schools and the remaining 12 percent attended either private (18) or parochial high schools (49).

Judging from the course work completed, entering students participated in relatively strong college preparatory programs while in high school. Seventy-seven percent (418) had four or more years of English, 77% (419) studied three or more years of mathematics and 57% had three or more years of natural science. Other course work is summarized in Table II.

Table II. High School Preparatory Program (N = 544)

	<u>Years of Study</u>				
	<u>one</u>	<u>two</u>	<u>three</u>	<u>four</u>	<u>none</u>
English	1%	4%	18%	77%	0%
Mathematics	3%	19%	30%	47%	1%
Natural Science	10%	23%	30%	37%	0%
History/Soc. Studies	6%	34%	35%	25%	0%
Social Sciences	31%	25%	12%	10%	22%
Fine Arts	23%	17%	10%	32%	18%
Foreign Language	21%	27%	14%	15%	23%
Business/distributive education	52%	22%	9%	3%	14%
Vocational/technical education	37%	8%	5%	3%	47%

While in high school, most entering teacher candidates tended to be active in extracurricular activities. Eighty-three percent (446) participated in sponsored clubs, committees or organizations. Forty-four percent (237) had a high level of involvement in interscholastic athletics or cheerleading. Involvement in other activities is summarized in Table III.

Table III. Involvement in High School Activities (N = 544)

<u>Activity</u>	<u>None</u>	<u>Some</u>	<u>Moderate</u>	<u>High</u>
Choir/Band/Orchestra	48%	12%	8%	32%
Theater/Debate	59%	21%	8%	12%
Newspaper/Yearbook	66%	19%	5%	9%
Clubs/Committees				
Organizations	17%	34%	25%	24%
Interscholastic				
Athletics/Cheerleading	29%	16%	11%	44%
Intramural Athletics	52%	26%	10%	12%
Community Service	30%	43%	16%	11%
Church Related Activity	34%	31%	18%	17%
Travel: U.S./Canada	16%	32%	25%	21%
Travel: Foreign	77%	12%	5%	6%
Pleasure Reading	5%	27%	26%	42%
Part time paid employment	11%	22%	28%	39%

Ninety-five percent (513) of the respondents graduated from high schools that sponsored chapters of the National Honor Society and of those, 52% (268) were elected to membership. Sixty-two percent (334) of the respondents also held one or more school leadership positions, such as class officer, newspaper editor, team captain, etc.

During high school, nearly all respondents had interactions with elementary and/or middle school aged children. See Table III. Babysitting was the most common form of interaction (81%). Nineteen percent served as camp counselors, 25% as a sports coach and 21% as a Sunday school teacher. Other interactions are summarized in Table IV.

Table IV.

## Interactions With Young Children ( N = 539)

Camp Counselor	19%
Sports Coach	25%
Sunday School Teacher	21%
Swimming Teacher	13%
Babysitting	81%
Teaching involving one child	37%
Teaching involving groups	40%
Teaching involving handicapped	15%

#### C. COLLEGE BACKGROUND

Forty-five percent (243) transferred to Michigan State from another institution.

In a typical MSU term, candidates carried	less than 11 credits	9% (50)
	11 to 13 credits	25% (143)
	14 to 16 credits	52% (281)
	17 or more credits	13% (69)

The majority of respondents were juniors (58%). Fourteen percent were seniors, 13% were sophomores, and 15% had already earned a bachelors degree. And of these,

- 47% (225) are in Elementary Certification Programs
- 44% (239) are in Secondary Programs
- 7% (36) are in Special Education Programs
- 7% (36) are Child Development Majors also earning a teaching certificate.

Thirty-one percent (162) of the entering candidates were required to enroll in college level remedial mathematics, 19% (98) remedial reading and 21% (111) remedial writing.

#### D. CAREER ORIENTATIONS

Twenty-four percent of those entering teacher preparation programs in 1985-1986 reported "high" or "complete" confidence in their overall ability to succeed as teachers with no further course work or experience in teaching. The proportion who said they have "high" or "complete" confidence in their ability to carry out the 12 teaching roles listed in the survey range from 17% to 39%. (See Table V.)

Table V

Level of Confidence in Ability To Perform  
Selected Teaching Roles

<u>Role</u>	Perceived Confidence Level		
	<u>Little or None</u>	<u>Moderate</u>	<u>High to Complete</u>
1. Deciding what content to teach.	27% (144)	48% (262)	25% (136)
2. Designing lessons, units and courses of study.	36% (194)	47% (256)	17% (93)
3. Establishing effective working relations with students from diverse cultural/academic backgrounds.	21% (115)	42% (226)	37% (199)
4. Responding appropriately to disruptive pupil behavior.	18% (88)	46% (249)	37% (202)
5. Establishing classroom environment in which students take responsibility for themselves and others in the group.	16% (84)	46% (249)	38% (205)
6. Applying effective methods of teaching specific subjects such as reading and mathematics.	35% (187)	48% (257)	17% (94)
7. Providing instruction that addresses individual needs/concerns.	27% (144)	47% (255)	26% (139)
8. Maximizing student understanding of subject matter.	24% (129)	47% (256)	29% (156)
9. Motivating students to participate in academic tasks.	14% (74)	47% (253)	39% (210)
10. Assessing student learning and development.	29% (157)	48% (257)	23% (127)
11. Making instructional decisions in a sound and defensible manner.	26% (141)	45% (242)	29% (157)
12. Analyzing and improving your own teaching performance.	18% (98)	43% (233)	39% (209)
MEANS:	<u>24.2%</u>	<u>46.2%</u>	<u>29.6%</u>

Respondents were also surveyed on their opinions of the relative importance of various sources of professional knowledge needed for teaching.

83% (448) rated on-the-job experience as teacher as crucial

81% (437) rated experiences in school that are a part of the teacher preparation program (pre-student teaching, student teaching) as crucial

61% (325) rated courses in the content area each will teach as crucial

67% (362) rated courses that focus on methods of teaching (reading/management/organization) as crucial

Other ratings of professional knowledge sources are summarized in Table VI.

Table VI.

**Ratings of the Sources of Professional Knowledge  
Needed For Teaching**

	Unimportant Questionable <u>or Ambiguous</u>	Important or <u>Crucial</u>
1. Courses in the content area you intend to teach.	3% (28)	97% (519)
2. General education courses (courses that satisfy the university's general education requirements.)	40% (217)	60% (324)
3. Courses that focus on methods of teaching (methods of teaching reading, classroom management/organization).	2% (12)	98% (528)
4. Educational psychology courses (child growth and development, psychology of individual differences, psychology of instruction).	8% (43)	92% (498)
5. Courses in Foundations of Education (philosophy of education, educational sociology, politics of schools).	33% (179)	67% (363)
6. Courses/lab experiences that focus on synthesis of educational knowledge and practice.	13% (71)	87% (467)
7. Participating in research projects that focus on teaching or teacher education.	30% (159)	60% (381)
8. Reading books/articles that you have selected that deal with education or with your major field of study.	12% (66)	88% (476)
9. Experiences in school that are a part of the teacher preparation program (pre-student teaching, student teaching).	1% (4)	99% (535)
10. Your observations and experiences as a kindergarten through 12th grade student.	11% (62)	88% (477)
11. Working with groups of children in non-school settings (Sunday school teacher, camp counselor).	19% (104)	81% (438)
12. On-the-job experience as a teacher.	1% (7)	99% (530)

Eighty-six percent (462) reported intending to search for a job in Michigan and of those, only 59% (274) would be willing to leave the state for a teaching position.

Eighty-eight percent (469) indicated that teaching is either the only career they are considering, or their first choice of careers. Ten percent (53) said that teaching has some appeal, but it is not their first career choice. Two percent (10) indicated that they have no intention of ever teaching.

The survey also asked respondents whose first choice of careers was teaching to reflect on 10 selected career motivating factors and indicate "yes" if the factor played a significant role in their decision to become a teacher. As the data summarized in Table VII indicates, the most common source of motivation for entering the teaching profession is the "love of children."

Table VII.  
Motivating Factors for Entering the Teaching Profession

	<u>YES</u>	<u>NO</u>
1. Teaching provides an opportunity to be creative.	80% (376)	20% (95)
2. I believe the quality of education must be improved.	85% (394)	15% (71)
3. I love to work with children.	89% (415)	11% (54)
4. I have always enjoyed school.	58% (275)	42% (196)
5. I was not as successful as I had hoped to be in courses that would have prepared me for my initial choice of careers.	19% (85)	81% (373)
6. Persons I respect have encouraged me to become a teacher.	57% (267)	43% (203)
7. Teaching provides an opportunity to apply what I have learned in my major field of study.	74% (346)	26% (120)
8. I can make better use of my abilities in teaching than in other careers I might enter.	72% (338)	27% (127)
9. Teaching is more likely to provide a sense of personal achievement and satisfaction than is true of other careers I might enter.	85% (401)	15% (70)

Table VII. (cont.)

## Motivating Factors for Entering the Teaching Profession

	<u>YES</u>	<u>NO</u>
10. Teachers have a lot of time off, especially during the summer.	47% (216)	53% (242)
11. Through teaching I can help students develop		
(A) a sense of personal achievement and self esteem	99% (472)	.6% (3)
(B) an appreciation of cultures other than their own	82% (383)	18% (82)
(C) knowledge and understanding of the subjects I consider important	94% (442)	6% (28)
(D) a sense of excitement about learning new things	98% (464)	2% (10)

Of the respondents who report that teaching is their first or only career choice 63% (299) decided before high school 22% (106) during high school and 15% (70) after high school.

When asked to identify an individual who was especially influential in the decision to become a teacher

37% (173) of the respondents said no one
29% (137) said a former teacher
19% (88) said mother or father
10% (48) said "other"
6% (28) said close relative(s).

These respondents also indicated they would prefer to begin their teaching careers at the 54% (252) elementary level  
10% (47) middle school level  
36% (171) at the high school level.

And they would prefer to begin teaching in 55% (258) a suburban school setting  
19% (88) a rural school  
10% (47) in an inner city/urban school.

When asked how many years each of these "teaching is the first/only career for me" respondents will work as a teacher

59%	(274)	said more than 10 years
36%	(166)	between 5 and 10 years
6%	(27)	less than 5 years.

Of those who expect to teach less than ten years

44%	(101)	expect a more advanced position in education
30%	(69)	will leave to raise a family
26%	(59)	to seek a career outside of education.

When the 252 elementary respondents who said "teaching is my first/only career choice" were asked the subjects each would feel most successful teaching

24%	(61)	selected social studies
23%	(58)	selected reading
19%	(49)	selected mathematics
18%	(47)	selected language arts
16%	(42)	selected science.

These respondents also indicated the subjects each would feel least successful teaching:

31%	(83)	said math
30%	(80)	said science
18%	(47)	said social studies
15%	(40)	said language arts
7%	(18)	said reading.

#### E. GENERAL ORIENTATION TO TEACHING

When asked to identify which of four goals of schooling candidates considered most important

46%	(247)	selected academic development
40%	(214)	selected personal development
11%	(57)	selected social development
3%	(14)	selected vocational development.

Conversely, when asked to select the least important goal of schooling

73%	(371)	selected vocational development
16%	(79)	selected social development
7%	(36)	selected personal development
4%	(23)	selected academic development.

But when asked the "goals of schooling" question in a different manner, most candidates indicated all of the four goals were "important" or "crucial." See Table VIII.

Table VIII.

Perceived Importance of the General  
Goals of Schooling  
(N = 541)

<u>Goal</u>	<u>Level of Importance</u>			
	<u>Unimportant</u>	<u>Questionable</u>	<u>Important</u>	<u>Crucial</u>
A. Promote academic background	0%	1%	26%	73%
B. Enhance personal development	0%	2%	33%	65%
C. Facilitate social development	0%	3%	40%	57%
D. Promote vocational development	1%	8%	52%	39%

Entering candidates reported that their greatest satisfaction as a teacher would be to be recognized for their ability to

48% (256) encourage youngsters to accept responsibility for their own actions  
34% (184) promote high levels of academic achievement  
18% (98) work effectively with students from diverse backgrounds.

These candidates also reported that they believe the most frequent source of student failure is

42% (223) each student's lack of academic motivation  
23% (120) the teacher's failure to consider the unique interests and abilities of students  
22% (119) the teacher's failure to use effective teaching methods  
13% (68) each student's home background  
1% (6) student's lack of intellectual ability.

and, conversely, these candidates reported that they believe the most frequent source of student success is

- 52% (276) the student's enthusiasm or academic motivation
- 22% (116) teacher's use of effective methods
- 16% (84) teacher's attention to the unique interests and abilities of students
- 8% (40) student's home background
- 3% (17) student's intellectual ability.

When the candidates were asked which of four qualities was most essential to teaching success,

- 36% (192) selected "communicating knowledge at a level students understand";
- 33% (176) indicated "establishing a cooperative learning environment where students take responsibility for their own learning and that of others";
- 26% (140) selected "responding appropriately to differences in the academic, social, and cultural background of individual students"; and
- 5% (27) selected "knowing what sources of information to consider when making important educational decisions."

Given three choices, what would pose the most serious problem for these candidates as teachers?

- 53% (289) said "a lack of student desire to learn";
- 26% (142) said "lack of parent support and interest"; and
- 20% (110) said "a lack of direction/support from school administrators."

And given a choice of three types of students to teach, the entering candidates prefer to teach

- 44% (235) highly motivated students
- 29% (156) students of average academic motivation
- 27% (143) students who must be challenged or somehow motivated to learn.

How would the entering candidates like to be remembered by their students? Given three choices,

- 43% (231) as promoting high levels of academic achievement;
- 37% (200) as enhancing students' self esteem and
- 20% (109) as teaching students to accept responsibility for their own beliefs and actions.

Given five adjectives, these candidates would like their students to describe them as a teacher who is

50%	(262)	"caring"
29%	(152)	"enthusiastic"
10%	(52)	"patient"
6%	(31)	"organized"
5%	(27)	"knowledgeable."

#### F. EDUCATIONAL BELIEFS

The final section of the entry study asked participants to indicate the extent to which they agreed or disagreed (5 point scale) with each of 53 statements describing educational beliefs. Appendix I reports the percentages of agreement/disagreement of the entering students with each belief statement. The column labeled %A represents the percent of respondents who "agreed" or "strongly agreed" with the statement. The column labeled %D reports the percent of entering students who "disagreed" or strongly disagreed" with the belief as stated. By using the equation (100% - (%A - %D) it is possible to determine the percent of students who "neither agreed nor disagreed" with each statement.

The belief statements in Appendix I are not listed in the order appearing on the survey questionnaire. Rather, they are presented in four "clusters" or functional areas:

1. Teacher Expectations	2. Classroom Management/Social Context
3. Curriculum Planning and Policy	4. Teacher Responsibilities

This classification system is somewhat arbitrary in that some belief statements may easily fit into one or more clusters, depending on the interpretation given the statement by individual readers. It is also possible to sort the 53 statements into other categories such as those that were initially used to derive the beliefs inventory (see Freeman, 1986).

As the data summarized in Appendix I show, entering candidates were most likely to agree with the following seven belief statements:

95% AGREE that risk taking and making mistakes are essential components of social, emotional, and intellectual development.

91% AGREE that to be a good teacher, one must continually test and refine the assumptions and beliefs that guide his/her approach to teaching.

88% AGREE that students should be required to pass tests in reading, writing, and mathematics in order to graduate from high school.

87% AGREE that teachers should establish and enforce clear cut rules for acceptable student behavior.

86% AGREE that the development and delivery of a lesson plan should always be guided by a clear statement of what the students are expected to learn.

85% AGREE that school-aged youngsters are capable of learning to accept responsibility for their own actions.

84% AGREE that planning for instruction should almost always begin with a systematic diagnosis of student needs.

Respondents were most likely to disagree with the following seven belief statements:

88% DISAGREED that school learning is serious business; it doesn't have to be fun.

70% DISAGREED that it is fair to regular student for teachers to devote more time and attention to mainstreamed or other exceptional students.

67% DISAGREED that when working with slow learners, teachers should focus nearly all of their instruction on "minimum competency" objectives.

63% DISAGREED that students learn more when they work alone than when they work in groups.

61% DISAGREED that in all likelihood, an elementary-school student who has outstanding abilities in mathematics, also has outstanding abilities in reading and social studies.

57% DISAGREED that one of the most effective ways for teachers to increase motivation is to stimulate competition among students.

53% DISAGREED that instead of mixing students with different levels of ability, required high school courses should have separate classes for low achieving and high achieving students.

Finally, in addition to statements with which a majority of entering candidates agreed and disagreed, there were several statements with which a substantial number of candidates neither agreed nor disagreed. These may reflect areas in which the respondents feel they are not well enough informed to take a position.

49% NEITHER agreed nor disagreed that schools should function as agents to change society rather than as reinforcers of the status quo.

49% NEITHER agreed nor disagreed that instructional programs that seek to address interdisciplinary programs/themes are generally superior to those that treat subject matter as isolated disciplines.

47% NEITHER agreed nor disagreed that when working with students from low income families, teachers should rely primarily on teacher directed, whole group instruction.

47% NEITHER agreed nor disagreed that students should have a strong voice in planning classroom activities.

40% NEITHER agreed nor disagreed that subject matter courses should stress the way knowledge is derived in the corresponding academic disciplines.

39% NEITHER agreed nor disagreed that when making instructional decisions, teachers should rely on what "feels right" instead of "what available information suggests is right" whenever these two sources of information conflict.

38% NEITHER agreed nor disagreed that teachers should assume responsibility for eliciting parent support.

Only two belief statements fell into a bimodal response pattern, that is, as many candidates agreeing as disagreeing with a statement:

39% AGREE and 40% DISAGREE that a variety of face-to-face interactions with individuals of diverse cultures will not necessarily promote understanding and acceptance of those cultures, and.

38% AGREE and 35% DISAGREE that given the opportunity to choose, middle- and high-school aged students will make viable decisions about what they need to learn.

### Profiles of Entering Michigan State University Teacher Education Students

#### An Overview

General Background: Most students entering teacher education programs at Michigan State University are Caucasian (96%), under 22 years old (64%), and from families with three or more children (78%). A majority expect to study for an advanced degree (57%). Seventy-six percent are females.

The parent(s) of respondents generally had some study beyond high school (65%); 42% have advanced degrees. Candidates' mothers were generally homemakers (42%) or white/blue collar workers (41%). Their fathers were white collar workers (57% or employed in skilled trades 29%). The median family income was between \$35,000 - \$50,000.

Entering candidates tended to either not to be employed at all (40%) or to work less than 20 hours each week (44%). Most (73%) do not participate in volunteer (community) work and the typical candidate studies or does school related work between 16 and 20 hours each week.

High School Background: Fifty-three percent of the entering candidates graduated from suburban high schools with relatively large graduating classes. Only 16% graduated from schools with less than 100 seniors. Most (88%)

attended public high schools, and completed three (18%) or four (77%) years of English, three (30%) or four (47%) years of mathematics, three (30%) or four (37%) years of natural science and three (35%) or four (25%) years of history/social studies. While in high school, 52% were elected to the National Honor Society and 62% held school leadership position(s). Eighty-thre percent participated in extracurricular activities of some sort.

College Background: Nearly all respondents had interactions with children prior to enrolling in a teacher preparation program: babysitting, teaching small groups, coaching, tutoring and/or Sunday school teaching.

A majority realized they would be going to college before high school (69%). Most carry 14 to 16 hours of credit each term, and are in the junior class. Thirty-one percent enrolled in a college level remedial math course.

Career Orientations: A majority of the entering candidates reported a moderate to high (55%), or complete (30%) confidence level in their ability to succeed now as a teacher. They were especially confident they can motivate students to participate in academic tasks (86% moderate to complete confidence).

Entering candidates were most likely (83%) to rate on-the-job-experience as a teacher and experiences in schools that are part of the teacher preparation program (81%) as crucial sources of professional knowledge needed for teaching although more than 50% of all the respondents rated every source listed in the survey as "crucial."

Most entering candidates - intending to search for a job in Michigan (86%); only 56% of this group w be willing to leave the state for a satisfactory teaching position. Ente... andidates also had a high level of commitment to teaching: 88% indicate th t .iching is the only career or first choice of careers they are considering.

Among those who plan to become teachers, 89% selected "I love to work with children" as a factor which played a significant role in their decision. This motivating factor was closely followed by two others: "I believe the quality of education must be improved" (85%) and "teaching is more likely to provide a sense of personal achievement and satisfaction than is true of other careers I might choose" (85%). Entrants also reported that through teaching, each can help learners develop a sense of self-esteem and personal achievement (99%), an appreciation of cultures other than their own (82%), a sense of excitement about learning new things (98%) and a knowledge/understanding of content areas each candidate considers important (94%).

Of the entering candidates who report that teaching is their only or first career choice, 63% decided to become teachers after high school, prefer to begin their teaching in a suburban (55%) public school (62%) and expect to teach more than 10 years (59%). Elementary candidates feel they would be most successful teaching reading or social studies and least successful teaching science and mathematics.

General Orientations to Teaching: When asked to select one of four goals of schooling as the most important, 46% selected "academic development," and 40% selected "personal development." Seventy-three percent felt "vocational development" was the least important goal of schooling. About half (48%) of the candidates indicated that "encouraging youngsters to accept responsibility

for their own actions" would provide their greatest source of satisfaction as a teacher and that a student's enthusiasm or academic motivation is the greatest source of student success (52%).

When given a set of alternatives, 53% said "A lack of student desire to learn" is likely to pose their most serious problem as a teacher and 44% said they prefer to work with highly motivated students.

Respondents stated they would like their students to remember them as promoting high levels of academic achievement (43%) and to describe them as a "caring" teacher.

Educational Beliefs: Entering candidates were most likely to agree that risk taking and making mistakes are essential components of social, emotional and intellectual development (95% agree) and that to be a good teacher, one must continually test and refine the assumptions and beliefs that guide his/her approach to teaching (91% agree). Entering candidates also believed that students should be required to pass tests in reading, writing and mathematics in order to graduate from high school (88%) and that teachers should establish and enforce clear cut rules for acceptable student behavior (87% agree). Respondents also believe in the importance of students knowing what they are expected to learn (86%) and that these learning goals should be based on a systematic diagnosis of student needs (84%).

On the other hand, entering candidates were most likely to disagree that school learning is serious and doesn't have to be fun (88% disagree). The candidates also disagreed that it is fair to regular students for teachers to devote more time and attention to mainstreamed or other exceptional students (70% disagreed) yet agreed (62%) that special efforts should be made to mainstream as many handicapped children as possible into the regular classroom.

There were also a number of belief statements with which the entering candidates (40% to 49%) neither agreed nor disagreed. These included:

1. Schools should function as agents to change society rather than as reinforcers of the status quo (49% neither agreed nor disagreed).
2. Instructional programs that seek to address interdisciplinary programs/themes are generally superior to those that treat subject matter as isolated disciplines (49% neither agreed nor disagreed).
3. When working with students from low income families, teachers should rely primarily on teacher directed, whole group instruction (47%).
4. Students should have a strong voice in planning classroom activities (47%).
5. Subject matter courses should stress the way knowledge is derived in the corresponding academic disciplines (40%).

## SECTION II. SUBPOPULATION CONTRASTS

### A. ELEMENTARY/SECONDARY CONTRASTS

This section of the analysis reports differences in the entry level responses of elementary and secondary education candidates. Among the 545 candidates who completed the entry survey, 188 are elementary and 170 are secondary. The remaining 187 identified themselves as pre-school, middle school or special education candidates.

Fifty-eight percent (188) of the 358 elementary and secondary candidates were juniors, 12% seniors and 12% post B.A. students. There was only one freshman in the group. The remaining 12% were sophomores. Ninety percent of the elementary candidates and 59% of the secondary candidates were females. Nearly all members of both groups were Caucasian.

Chi-square tests were used to compare responses of the 188 elementary and 170 secondary candidates. Because participants sometimes chose to skip questions, sample sizes were usually smaller than these two figures and varied slightly from question to question. The probability of a Type I error was fixed at .05 across all tests.

Academic Backgrounds. Repeated reference will be made in this section of the report to an article by Book and Freeman appearing in the April, 1986 issue of the Journal of Teacher Education. Using an earlier sample of 174 elementary and 178 secondary candidates, the authors reported differences between these groups on the same entry characteristics as the current investigation. There continues to be important differences in the patterns of high school course work completed by elementary and secondary candidates, as the Book/Freeman report noted. As in earlier years, current secondary teacher candidates had more high school course work in science and mathematics, compared to the elementary candidates. It is also interesting to note that the percent of all candidates taking three or more courses in various fields has increased notably since the Book/Freeman report. See Table IX. The trend is for a higher percentage of current entering students to have taken three or more years of English (95.75% vs. 91.2%) natural science (66.8% compared to 61.5%), mathematics (79% vs. 72.4%), and history/social studies (60% vs. 53%). Enrollments in foreign languages and social science courses stayed about the same. The current groups enrolled in fewer fine arts courses than those described in the Book/Freeman report (42% vs. 49%).

Table IX.

Percent of Candidates Completing Three Years or More  
of High School Course Work in Specific Subjects

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(1) Fall, 1984 & Winter, 1985 (see Book and Freeman, 1986)

	<u>Eng.</u>	<u>Nat. Sci.</u>	<u>Math</u>	<u>Soc. Sci.</u>	<u>History Soc. Std.</u>	<u>Fine Arts</u>	<u>Foreign Lang.</u>	<u>Business Dist. Ed.</u>
Elementary (N = 174)	91.4%	54.3%	60.3%	24.0%	57.8%	48.4%	33.9%	---
Secondary (N = 178)	91.1%	68.6%	79.5%	14.8%	48.3%	48.4%	26.4%	---
Chi-Square (df = 4)	8.51	9.74*	12.14*	14.68*	4.91	1.72	6.66	---

(2) Fall, 1985 through Spring, 1986 (the current study)

Elementary (N = 188)	96.8%	59.4%	74.4%	22.5%	60.7%	42.5%	31.6%	14.4
Secondary (N = 170)	94.7%	74.2%	83.5%	19.6%	60.6%	41.5%	28.2%	8.3
Chi-Square (df = 4)	3.77	11.09*	23.32*	3.02	2.22	4.93	2.70	10.79*

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\*p ≤ .05

Although the percent of entering elementary candidates taking three or more years of mathematics in high school rose from 65% in the Book/Freeman study to 74% in the current study, it is puzzling to note that the percentage of the current elementary candidates who were required to enroll in remedial math courses was not lower than that reported in the Book/Freeman report (40% now, vs. 36% earlier). One might expect the remedial enrollment percent to drop somewhat, as it did for the secondary candidates (three or more years math enrollment rose from 79.5% to 83.5% for secondary candidates and remedial math enrollment dropped from 20% to 14.5%). Why a higher percent of elementary candidates were required to enroll in remedial math after having completed more high school math courses than their predecessors is worthy of further study.

Prior Teaching Experience. The Book/Freeman study reported that in their sample of 352 students, elementary candidates (174) were more likely than secondary candidates to interact with school-age children outside the family setting and to participate in teaching activities involving groups of children. In the 1985-1986 entry population, however, only babysitting activities remains as a distinguishing characteristic between elementary and secondary candidates. Elementary and secondary candidates appear to have participated rather equally in all other interactions with young children. (See Table X.)

Table X.

**Elementary/Secondary Candidates' Interactions  
With Young Children**

<u>Interaction</u>	<u>Elem. (N = 187)</u>	<u>Sec. (N = 170)</u>	<u>Chi Square df = 1</u>
Camp Counselor	16.6%	20.6%	.70
Sports Coach	20.3%	20.6%	4.44
Sunday School Teacher	19.3%	20.2%	.009
Swimming Teacher	13.4%	16.5%	.45
Babysitting	92.0%	65.1%	37.66*
Teaching Activities (one child)	37.4%	37.9%	.007
Teaching Activities (groups)	40.6%	37.1%	.341
Working With Handicapped Youngsters	16.0%	14.7%	.041

\*p ≤ .05

Career Decisions. When the entry candidates were presented with a list of reasons for choosing a career in teaching, both elementary and secondary candidates were most likely to check three reasons:

Through teaching I can help students develop

- (1) a sense of personal satisfaction and self-esteem; (99.2%)
- (2) a sense of excitement about learning new things (97.4%) and
- (3) a knowledge and understanding of subject areas I consider important. (94.1%) See Table XI.

Table XI.

Reasons For Choosing Teaching as a Career  
(Elementary Vs. Secondary)

	<u>Elem.</u>	<u>Sec.</u>	Chi Square <u>df = 7</u>
Teaching provides opportunity to be creative.	82.5%	78.0%	.87
Quality of education must be improved.	85.6%	82.6%	.38
I love to work with children.	97.8%	76.4%	35.35*
I have always enjoyed school.	58.7%	61.7%	.21
I was not as successful as I hoped to be in courses that would prepare me for my initial career choice.	19.7%	13.4%	1.97
Persons I respect encouraged me to teach.	61.6%	50.9%	3.68*
I can apply what I have learned in my major.	66.3%	83.3%	12.42*
I can make better use of my abilities in teaching than in other careers I might choose.	77.3%	66.3%	4.74*
I am more likely to gain personal achievement and satisfaction in teaching than other careers.	86.0%	83.1%	.36
Teachers have a lot of time off, especially summers.	52.5%	46.1%	1.18
Through teaching I can help students develop personal satisfaction and self-esteem.	98.9%	99.4%	.23
Through teaching, I can help students develop an appreciation of cultures other than their own.	89.2%	70.6%	18.18*
Through teaching, I can help students develop a knowledge and understanding of subjects I consider important.	92.4%	95.8%	1.26
Through teaching, I can help students develop a sense of excitement about learning new things.	98.4%	96.4%	.71

\*p ≤ .05

When compared to their secondary counterparts, teaching motivations for elementary candidates were more likely to include (1) the desire to work with children (97.8% vs. 76.4%) and (2) helping children develop an appreciation of cultures other than their own (89.2% vs. 70.6%). In other words, elementary candidates' motivations for entering teaching tended to be more child-centered, consistent with conventional expectations. It is also interesting to note that elementary candidates were more likely to report that persons they respect encouraged them to become teachers (61.6% vs. 50.9%) and that they can make better use of their abilities in teaching than in other careers (77.3% vs. 66.3%). In contrast, secondary candidates were more likely to choose teaching because teaching provides an opportunity to apply what they have learned in their respective field(s). (83.3% vs. 66.3%).

When considering differences between elementary and secondary candidates, elementary candidates chose "love to work with children," "wish to help learners develop an appreciation of different cultures," "feel they can make better use of their abilities in teaching," and "responded to encouragement from others to select teaching as a career" significantly more than secondary candidates. Besides these distinguishing characteristics, secondary candidates (83.3%) also differed significantly from elementary candidates (66.3%) in selecting "applying what each has learned in their major" as a differential motivating factor to enter teaching.

How elementary and secondary entering candidates would like to be remembered by their students 20 years from now provides further evidence of reasons for entering teaching: 45.1% would like to be remembered as promoting academic achievement and 34.6% as enhancing students' self-esteem. Both groups too, would like to be described by their students as caring (elementary: 52.2%; secondary: 43.3%) and enthusiastic (elementary: 28.7%; secondary: 30.5%). As in the Book/Freeman report, this study found little support for the belief that individuals enter teaching because they cannot "make the grade" in studies leading to other careers. Only 19.7% of the elementary candidates and 13.4% of the secondary candidates said they chose teaching because they were unsuccessful in courses that would have prepared them for their initial career choice.

These results are consistent with findings by Lorie (1975), Jantzen (1981), and the NEA (1972) that suggest a strong "service motive" is a dominant reason for choosing a teaching career. The data also suggests that a service orientation and a zeal for change are particularly strong motivations: 84.1% of all entering candidates indicate that one reason for entering teaching is the belief that the quality of education must be improved. In this study, 21.8% of the elementary majors and 33.3% of the secondary majors indicated that a former teacher was "particularly influential" in their decision to become teachers. More than twice as many parent(s) of elementary majors (23.4%) as compared to secondary majors (11.9%) were influential in the decision to become a teacher.

A significantly higher proportion of elementary than secondary candidates said that teaching is the only career they are considering at this time (49.2% vs. 29.2%). Forty-two percent of both groups did not expect to teach for more than 10 years. Among those who expect to leave teaching within 10 years, a higher proportion of secondary than elementary candidates expected to leave to prepare for a career outside of education (22.5% vs. 17.2%), or to prepare for a more advanced position in education (47.5% vs. 38.7%). More elementary majors than secondary said that they expect to leave teaching to raise a family (39.8% vs. 28.8%).

Perceived Sources of Professional Knowledge. How do entering elementary and secondary candidates rate sources of professional knowledge needed for teaching on a scale of:

unimportant  
questionable or ambiguous  
very important  
crucial?

Table XII.

Sources of Professional Knowledge Rated  
as Very Important or Crucial

	<u>ELEM.</u>	<u>SEC.</u>	<u>Chi Square</u>	
			<u>df=2</u>	<u>df=3</u>
Courses in the content area you intend to teach	95.2%	97.0%	--	6.63
General Education courses	58.3%	59.4%	--	1.63
Courses on methods of teaching reading	99.0%	97.1%	8.45*	--
Educational Psychology Courses	95.7%	87.0%	--	11.81*
Courses in Foundations of Education	72.2%	61.6%	--	4.94
Synthesis of educational knowledge and practice	90.8%	81.6%	--	11.18*
Participating in educational research projects	74.3%	63.6%	--	13.07*
Reading self-selected books/articles dealing with education or major field of study	89.4%	84.1%	--	3.50
In-School experiences that are part of the teacher education program (student teaching, etc.)	98.9%	99.4%	9.66*	--
Observations and experiences as a K-12 student	86.1%	93.3%	--	6.42
Working with groups of children in a non-school setting	84.1%	73.9%	--	7.02
On-the-job experiences as a teacher	98.4%	98.3%	--	1.50

\*p ≤ .05

In general, elementary and secondary candidates did not differ in their perceptions of sources of professional knowledge needed for teaching. An overwhelming majority of candidates in both groups rated (1) courses in the content areas each will teach, (2) courses in the methods of teaching reading, (3) on-the-job experiences as a teacher and (4) in-school experiences that are part of the teacher education program (pre-student teaching and student teaching field experiences) as very important or crucial sources of professional knowledge. While a majority of all candidates rated all sources listed as very important/crucial, candidates tended to see courses in the Foundations of Education and participation in educationally oriented research projects not as helpful as others. General Education courses (those that satisfy the University's general education requirement, not those offered by the College of Education) were rated as least helpful sources in comparison to others, but were still rated as very important or crucial by a majority of both elementary and secondary candidates.

Perceived Confidence Levels. When asked "What level of confidence do you have in your ability to succeed now as a full time teacher with no further course work or experience in education"? a higher proportion of entry level secondary majors than elementary candidates (27.3% vs. 21.9%) reported they had high or complete confidence in their current abilities. In fact, as shown in Table XIII, candidates entering secondary programs report higher levels of confidence than their elementary counterparts across all 12 areas of teaching listed in the survey. These differences were greatest for (1) deciding what content to teach; (2) designing lessons, and (3) maximizing student understanding of subject matter.

Table XIII.

Candidates' Perceived Confidence Level Rated as "High To Complete"  
on Present Teaching Abilities

	ELEM.	SEC.	Chi Square <u>df = 3</u>
Deciding what content to teach/not to teach	16.6%	33.7%	23.72*
Designing lessons, units, and courses of study	14.4%	33.7%	5.08
Establishing effective relations with students from diverse cultural/academic backgrounds	34.2%	42.6%	15.88*
Responding appropriately to disruptive students	35.3%	39.6%	1.17
Establishing a classroom environment in which students actively take responsibility for themselves and for others in the group	39.1%	44.1%	4.11
Applying effective methods of teaching specific subjects such as reading and mathematics	15.6%	22.0%	16.45
Providing instruction that addresses individual needs and achievements	23.0%	29.2%	7.75
Maximizing student understanding of the subject matter	24.1%	38.5%	23.27
Motivating students to participate in academic tasks	35.9%	44.9%	7.09
Assessing student learning and development	21.3%	24.9%	5.90
Making instructional decisions in a sound and defensible manner	23.9%	34.9%	13.43*
Analyzing and improving your own teaching performance	32.1%	40.2%	4.28

\*p ≤ .05

Education Beliefs. Elementary and secondary candidates were remarkably similar in their responses to the 53 belief statements on the survey. In fact, none of the 53 chi-square tests of difference in response patterns was statistically significant when the probability of a Type I error was fixed at .05. Therefore, descriptions of the response patterns to the beliefs inventory for the population (see Appendix I) are valid for both elementary and secondary candidates.

Implications. Book and Freeman conclude their report of differences among elementary and secondary candidates with several recommendations for teacher education. These include:

1. Secondary teacher preparation programs should provide early structured field experiences in schools.

This recommendation is based on their reported data which shows that relative to their elementary counterparts, secondary candidates have less teaching experience. The current study, however, shows almost identical prior teaching experiences, save for babysitting, which is characteristic of elementary candidates (mostly female).

It is still true, however, that secondary candidates have more confidence in their current ability to teach than elementary candidates. This difference in confidence levels may stem, in part, from the fundamental "subject oriented" (secondary) or "child oriented" (elementary) view of education. That is, secondary majors may feel more "in control" in dealing with subject matter compared to an elementary orientation of dealing with all aspects of human needs and behaviors.

2. The College of Education should require courses in science and mathematics for those elementary candidates who have limited high school backgrounds in these areas.

Although the data are not as convincing as those reported by Book and Freeman, the current data supports this recommendation. Book and Freeman argue that elementary candidates will probably be required to teach both science and mathematics. In the current study, 25% have taken less than three years of mathematics and 40% have completed less than three years of science.

3. Advisors and faculty should be sensitive to the apparent differences in orientations to teaching among elementary and secondary candidates.

The results of the Book/Freeman investigation and of this study support the popular belief that elementary majors typically have a child-centered orientation to teaching while secondary candidates are likely to have a subject centered perspective. Those who believe that teacher education centered curricula should promote the development of balanced views of the purposes of schooling (i.e., that teachers should strive to enhance the academic, social, personal and vocational development) should be particularly sensitive to these entry level characteristics.

4. Advisors and faculty should be attentive to the levels of commitment to careers in teaching.

Although this recommendation of the Book/Freeman report focuses on the relatively low levels of commitment to teaching among males, this study suggests that attention should be paid to levels of commitment of all candidates, both elementary and secondary. Forty-two percent of both groups did not expect to teach for more than 10 years. Among those who expect to leave teaching within 10 years, a higher proportion of secondary than elementary candidates (22.5% to 17.2%) expect to leave to prepare for a career outside of education. These characteristics may be important in efforts to recruit promising teacher candidates and in attempts to promote a sense of personal commitment to the teaching profession.

## B. PROGRAM AFFILIATION CONTRASTS

When entry responses were analyzed by choice of program of the entering students, several response patterns emerged as rather unique to specific programs. In other words, entrants in a given program were sometimes more likely than entrants in any other of the four programs to respond in a certain way to a question. These types of differences are summarized in this part of the report. It is important to emphasize that characteristics cited of entrants to a given program may also be true for a majority of entrants to other programs. However, the proportion of students in the program under discussion was usually far higher than the corresponding percentage of entrants to any of the other programs. Moreover, if an entry characteristic is not noted, it does not mean the characteristic is not present in the program being considered, but only that the characteristic is present to about the same extent across all programs. Characteristics that are noted, however, are present in abundance in the group being discussed and are not present to such a degree in any other groups.

### I. Heterogeneous Classrooms Program (HC), Contrasts:

1. A higher percent of HC entrants (48%) were required to take remedial math than the average of other programs (25%) excluding the Learning Community Program, whose entrants averaged 53% enrollment in remedial math.
2. When asked to describe where teaching fits into their current career plans, HC entrants were most likely to say that "teaching is my only career choice" (70%). Since this question may be an important index of commitment to teaching, the responses by program affiliation are listed in Table XIV.

Table XIV.\*

#### Commitment to Teaching as a Career Choice (By Program)

	Heterogeneous Classrooms N = 23	Learning Community N = 36	Academic Learning N = 47	Multiple Perspectives N = 86	Standard Program N = 340
Classroom teaching is the only career I am considering at this time	69.6%	61.1%	53.2%	36.0%	32.1%
Classroom teaching is my first choice of careers I am considering	26.1%	36.1%	44.7%	59.3%	51.5%
Teaching has some appeal but is not my first career choice	4.3%	2.8%	2.1%	3.5%	13.8%
I do not intend to teach	0%	0%	0%	1.2%	2.6%

\* Chi Square = 40.52 with 12 degrees of freedom; p = .0001

3. A relatively high proportion of HC entrants (50%) feel that the most important goal of schooling is "personal development".
4. A disproportionate number of HC entrants report that they would prefer to be recognized for their ability to work effectively with students who come from diverse backgrounds (48% vs. 18% average across the other programs) and feel that their greatest source of satisfaction will come from encouraging youngsters to accept responsibility for their own beliefs and actions (44% vs. 18% average across other programs).
5. The percent of the HC entrants who believe that a student's enthusiasm or academic motivation is the most frequent source of success (42%) is equal to the proportion who feel that success is most likely to result from the teacher's attention to the unique interests and abilities of students. Other groups give different weights to these two factors.
6. Given four sources, HC entrants believe that responding appropriately to differences in social, academic and cultural backgrounds of individual students will be most essential to teaching success (56% vs. 23% average in other programs).
7. HC entrants believe that lack of parent interest/support would pose the most serious problem for them as teachers (52% vs. 23% average in other programs). Entrants in other programs are most likely to select lack of student desire to learn (average of 57% vs. HC of 32%).
8. HC entrants would prefer to work with learners who must be challenged or somehow motivated to learn (56% vs. 25% in other groups).
9. HC entrants believe, more than other program groups, that special efforts should be made to mainstream as many handicapped children as possible into the regular classroom (84% vs. 59% average across other programs).
10. Eighty-eight percent of the HC entrants disagreed with the statement that students learn more when they work alone than when they work in groups (compared to an average of 64% in other groups).
11. While an average of 35% of other groups believe that teachers should use the same standards in evaluating the work of all students in the class, only 17% of HC the entrants agreed with this statement.
12. HC entrants do not agree nearly as often (42% vs. other group average of 73%) that academic success plays a central role in the development of a healthy self-concept.
13. As a group, the HC entrants are as likely to agree (26%) or disagree (26%) that self-concepts and levels of academic achievement of individual students tend to conform to the expectations of their teachers. Students in other programs are likely to agree (average of 53%) that this is the case.
14. No HC respondent disagreed that schools should function as agents to change society rather than as reinforcers of the status quo. On the average, 15% of other program participants disagreed with this statement.

15. A much smaller percentage of the HC entrants (8% vs. 32% average in other programs) agreed that exceptional students can best be served in special schools or centers.
16. Ninety-six percent of the HC entrants believe that teachers should strive to establish a student-centered classroom rather than a teacher centered classroom (other programs average 74% excluding the Learning Community program entrants of whom 91% agree with this belief).
17. A smaller percent of HC entrants disagreed (13% vs. 29% average in other programs) that schools must allocate more resources to some groups of students than to others to provide educational equity.
18. No entrant to the HC program disagreed that schools can reduce racism among students. Nearly all HC students agreed (83%) that schools can do this (compared to 72% in other programs).
19. HC entrants tend to believe that teachers are responsible for eliciting parent support (61% vs. an average of 44% in other groups).
20. Sixty-seven percent of the HC entrants disagreed that students who disrupt class activities day after day should be removed from the classroom compared to an average in the other programs of 43%.
21. Half (50%) of the HC program entrants agreed that parents should have a voice in deciding what content their children will be asked to learn compared to an average of 40% in other programs.
22. Sixty-one percent of the HC program entrants disagreed that when working with students from low income families, teachers should rely on teacher directed, whole group instruction (43% in other programs).
23. Only 17% of the HC entrants agreed that most students want teachers to assume an authoritative stance in the classroom (average in other programs is 54%) and 61% of the HC participants disagreed with this statement compared to an average of 29% in other programs.
24. Thirty-six percent of the HC entrants disagreed that planning for instruction should almost always begin with a systematic diagnosis of student needs (19% average in other programs).
25. Fifty-nine percent of the HC respondents agreed that teachers themselves must understand how each learned the subjects they are teaching (vs. 77.5% in other programs) and 41% disagreed with this statement vs. 22.5% in other programs.
26. Only 63% of the HC entrants agreed that the development and delivery of a lesson plan should always be guided by clear statements of what students are expected to learn (vs. 90% in other programs; and 38% of the HC respondents disagreed with this statement compared to an average of 10% in other programs).
27. The proportion of HC entrants who disagreed that it is fair to regular students to devote more time and attention to mainstreamed or other exceptional students (50%) is smaller than in other programs (73%).

'28. Finally, no HC respondent agreed that when a teaching strategy works in one class, it is very likely to work in a different class of students and 79% disagreed with this statement (40% average in other programs).

#### Heterogeneous Classrooms (HC), Overview:

Entering HC students are more likely to be required to take remedial math and have a more pronounced commitment to teaching at program entry time. They tend to be more committed to personal development as the most important goal of schooling as compared with other program participants and prefer to be recognized for their abilities to work with culturally diverse students. They believe that their teaching success lies primarily in their ability to respond appropriately to the social, academic and cultural backgrounds of individual students. Many see a need for increased parent support of schools and anticipate this as a serious problem. They tend to see themselves as responsible, too, for eliciting this support, however, and would like to see parents have a voice in deciding what their children will learn. Entering teacher candidates in the HC program are likely to see themselves as problem solvers who prefer to work with learners who must be challenged or somehow motivated to learn.

Generally, HC entrants would like to see as many handicapped children mainstreamed into their classrooms as possible and do not believe that students learn more when they work alone than when they work in groups. HC respondents tended to say that they should not use the same standards in evaluating the work of all students and that academic success is not as central as some believe in the development of a healthy self-concept. HC entrants are interested in developing a healthy self-concept in multiple ways and feel that learners can experience many kinds of success in schools besides academic success.

Apparently, HC entrants are quite open to information regarding the relationship of teacher expectations to academic achievement and self-concept. Almost 50% neither agreed or disagreed that there is a relationship and the other 50% are evenly split on whether academic achievement and self-concept conform to teacher's expectations. HC entrants see student-centered classrooms as an ideal arrangement and feel that most students do not want an authoritative teacher. HC entrants believe that schools can and should reduce racism among students and see themselves as instrumental in helping schools decrease racism. HC entrants may be more tolerant of disruptive student behavior and may view this as a problem to be solved through individual attention and appreciation of cultural differences.

Fifty percent disagree that it is fair to regular students to devote more time and attention to mainstreamed students; only 8% agree. Yet, HC students would like to see as many students mainstreamed as possible. So how will the mainstreamed students receive the instruction needed? In other words, HC entrants convey a positive, optimistic viewpoint that somehow each can be fair to all and still give the attention needed to special students.

#### II. Learning Community Program (LC), Contrasts:

1. 80% of the Learning Community candidates report moderate or high levels of involvement in "reading for pleasure" activities versus 33% in other programs.

2. 81% of the LC participants carry 14-16 credits per term vs. 48% in other programs.
3. As shown in Table XV, a higher percent of Learning Community Program participants are required to take remedial courses than the average percent in other programs:

Table XV.

Learning Community Percent Enrollment in Remedial Courses

	<u>Learning Community</u>	<u>Heterogeneous Classrooms</u>	<u>Average Other Three Programs</u>
Remedial Math	53%	48%	24%
Remedial Reading	28%	13%	14%
Remedial Writing	36%	17%	17%

4. Like their counterparts in the Standard and the Academic Learning Programs, Learning Community entrants report a "High to Complete" confidence in their current abilities to perform selected teaching roles (see Table XVI).

Table XVI.

Confidence Level on Some Present Teaching Abilities Rated High To Complete

	<u>Learning Community</u>	<u>Standard Program</u>	<u>Academic Learning</u>	<u>H. C. Program</u>	<u>Multiple Perspectives</u>	<u>Chi Square df = 12</u>
Motivate students to participate in academic tasks	33.2%	46.8%	35.6%	13.0%	19.5%	49.03*
Assess student learning and development	25.0%	29.3%	21.8%	4.2%	5.7%	34.12*
Make instructional decisions in a sound manner	30.6%	34.3%	30.4%	0%	13.8%	44.83*
Analyze and improve your own teaching performance	44.4%	43.3%	32.6%	29.2%	24.1%	24.19*

\*p ≤ .05

5. Among entrants to all five programs, LC entrants had the second highest percentage (61.1%) of "teaching is my only career choice" (see Table XIV).

6. The parent(s) of the LC entrants were more likely to encourage their decision to become a teacher (37%) compared to an average of 17% in the other programs.
7. Compared with entrants in other programs, LC candidates were more likely to report they would be most successful teaching social studies (31%) and least successful teaching mathematics (38%).
8. Like their counterparts in the Heterogeneous Classrooms program, a relatively high proportion of LC students feel that the most important goal of school is "personal development" (56% vs. 38% average in the other three programs).
9. Given a choice among three alternatives, LC entrants were more likely to report that they would prefer to be recognized for their ability to encourage youngsters to accept responsibility for their own beliefs and actions (69.4% vs. other programs average of 44%).
10. More than other groups, LC entrants believe that establishing a cooperative learning environment, where students take responsibility for their own learning and that of others will be most essential to teaching success (51.4% vs. average of 30% in other programs).
11. When given three choices, LC entrants were most likely to say that they hope their students will remember them 20 years from now as enhancing students' self-esteem (66.7% vs. other participants' average of 36%). [Note: One of the three choices was teaching "students to accept responsibility for their own beliefs and actions"]
12. 67% of LC entrants came from families with an annual income of \$35,000 or more vs. 42.5% in other programs.
13. Relative to students entering other programs, a smaller proportion of LC students participated in community or volunteer work (86.6% do not participate in any community/volunteer work vs. 70% in other programs).
14. Two-thirds of the LC entrants disagreed that nearly all students try to be fair, cooperative and responsible in their relations with other students and their teacher in the classroom setting. (66% vs. average of other programs of 37%)
15. Like the Heterogeneous Classroom entrants, no LC candidate disagreed that "teachers should strive to establish a student-centered classroom rather than a teacher centered classroom," and nearly all (91%) agreed with this statement.
16. 74% of the LC entrants agreed that teachers' decisions regarding "how to teach" are generally more important than their decisions of "what to teach" (average of 55% in the other programs excluding the academic learning program).
17. 50% of the LC candidates agreed that the ultimate criterion in deciding what to include in the curriculum should be "does this content have practical applications in daily living" (average of 32% in other programs excluding Multiple Perspectives).

18. Across the five programs, LC candidates were most likely to have mixed reactions to the statement, "instead of mixing students with different levels of ability, required high school courses should have separate classes for low achieving and high achieving students" (37% disagreed and 37% agreed with this statement).

Learning Community Program, Overview:

Entering students in the Learning Community Program, when compared to entering participants in other programs, do substantially more "reading for pleasure" and most report that they knew they were going to college before high school. LC candidates tend to carry a heavier academic load than other program participants and also have a higher percentage of enrollment in remedial courses in mathematics, reading and writing. A majority of LC entrants come from families with more than \$35,000 yearly income and tend to participate less in community or volunteer work than entrants to other programs.

The entering LC candidates bring a relatively high commitment to a teaching career and are supported in this decision by their parent(s). The entrants feel that as they start their professional programs, they would be most successful teaching social studies and least successful teaching mathematics. A higher proportion of LC candidates, more than any other program group, feel the most important goal of school is "personal development."

Generally, LC program entrants would like to be recognized for their abilities in encouraging youngsters to accept responsibility for their own actions and beliefs and anticipate achieving this by establishing a cooperative learning environment in the classroom where youngsters take responsibility for their own learning and the learning of others. LC candidates would like to be remembered by their students as enhancing each student's self-esteem.

More than other program participants, LC candidates do not expect learners to be fair, cooperative and reasonable in their relations with other students and their teacher in the classroom setting. Yet, LC participants are least likely to disagree that teachers should strive to establish a student-centered classroom rather than a teacher centered classroom.

Most LC candidates believe that decisions on "how to teach" are more important than "what to teach" and that the key criterion in deciding what content to include in the curriculum should be based on the desire for practical applications of what is learned. Finally, LC participants are evenly divided on the question of whether required high school courses should have separate classes for low achieving and high achieving students.

III. Academic Learning Program (AL), Contrasts:

1. Like their counterparts in the Multiple Perspectives Program, a relatively high percentage of the Academic Learning Program entrants (62%) were elected to the National Honor Society in high school (43% average in other programs).
2. Similar to entrants in the Standard and Learning Community programs, a relatively high percentage of AL entrants (36%) report that they have high or complete confidence in their abilities to motivate and assess learners and make sound instructional decisions.

3. A majority of AL candidates (53%) report that "teaching is my only career choice." (See Table XIV)
4. The percent of AL entering candidates who reported that they were encouraged by persons they respect to become a teacher (35%) was considerably lower than the corresponding figure for averages in other programs (62%).
5. AL entrants are less likely to say that they want to become teachers to help students achieve an appreciation of cultures other than their own (63% vs. 90% average in other programs). On the other hand, almost all AL entrants (97.8%) report that they want to become teachers "to help students develop a knowledge and understanding of subjects they consider important." (Average of 93% in other programs.)
6. Half (50%) of the AL candidates reported that no one was particularly influential in their decisions to become teachers compared to an average of 28.6% in other programs.
7. A relatively high proportion of the AL elementary entrants (33%) feel they would be most successful teaching mathematics (no other group reports that this would be their most successful teaching subject) and least successful teaching science.
8. The AL entrants are far more likely to report that their greatest sense of satisfaction as a teacher would come from their ability to promote high levels of academic achievement (60% vs. 19% average in other programs).
9. It is also characteristic of the entering AL candidates to believe that the most frequent source of student failure is a student's lack of academic motivation (64% vs. 37%) and that academic motivation is the most frequent source of a student's success (70.5% compared to other programs average of 48.7%).
10. Given four choices, a majority of AL entrants report that communicating knowledge at a level students understand will be most essential to teaching success (52.2% vs. other programs average of 16.7%).
11. Like entrants to the Learning Community Program, a relatively high proportion of the AL entrants (70%) agree that, in general, teachers' decisions regarding "how to teach" are more important than their decisions of "what to teach" (average of 55% in other programs excluding Learning Community).
12. And like LC entering students, AL entrants are likely to agree (59%) that teachers in grades 4-6 should assign at least one hour of homework every night (average of 38% excluding Learning Community).

#### Academic Learning, Overview

When compared to entering candidates in other programs, a higher percentage of Academic Learning Program entrants were elected to the National Honor Society in High School. About one-half report that "teaching is the only career for me."

Compared to other program entrants, entering AL candidates also bring a higher feeling of confidence in their current ability to motivate and assess student learning and their ability to make sound instructional decisions.

A lower percent of entering AL participants were encouraged to enter teaching by persons they respect and half said no one was particularly influential in their decision to become a teacher. AL candidates are less likely to be motivated to become teachers by their desire to help their students achieve an appreciation of cultures other than their own and are more likely to be interested in helping students develop a knowledge and understanding of subjects each considers important.

One third of the AL participants feel they would be most successful teaching mathematics (the only program group to report this) and least successful teaching science.

Academic motivation is a key to understanding student success and failure for the AL entrants. Entering candidates believe that not only is academic motivation the most frequent reason for student success, the lack of it is also the main reason for student failure. As one might expect, AL candidates also report that their greatest sense of satisfaction as a teacher would come from their ability to promote high levels of academic achievement, and that communicating knowledge at a level students understand is essential to success in teaching. Finally, AL participants say that decisions on "how to teach" are more important than decisions on "what to teach."

#### IV. Multiple Perspectives Program (MP), Contrasts:

1. Like their counterparts in the AL program, a relatively high percentage of the entering students in the Multiple Perspectives program were elected to membership in the National Honor Society while in high school (62% vs. the 43% average in other programs). A somewhat lower percent transferred to MSU from other institutions (29% vs. an average of 45% in other programs).
2. More than one-third (37%) of the Multiple Perspectives entering candidates expressed little to no confidence in their current ability to teach compared to 23% average in other programs. This general lack of confidence at program entry is also expressed toward each of the 12 teaching roles in the questionnaire.
3. The MP entrants were evenly divided (36% agreeing and 36% disagreeing) in their reaction to the statement "that no matter how hard they and their teachers try, some students who are placed in regular classrooms will never master all of the basic skills in reading and mathematics."
4. A clear majority of the MP entrants (68%) agree that the ultimate criterion in deciding what to include in the curriculum should be "does this content have practical application in daily living?" (Compared to an average of 36% in other programs).

There were no other distinguishing characteristics or trends among the MP entering students that set them apart from other groups. In other words, across nearly all questionnaire items, MP students tended to respond in ways that were similar to other groups. For example, when asked to indicate which of the four general goals of schooling is the most important, the MP candidates selected academic development (50% vs. average of 46% across all programs); personal development (38.4% vs. average of 40.2%); social development (10.5% vs. average of 10.7%) and vocational development (1.2% vs. average of 2.6%).

V. The Standard Program (SP), Contrasts:

The Standard Program is the largest teacher education program at Michigan State. Of the 545 students who completed the entry survey, 349 or 64% were in the Standard Program.

1. Candidates entering the Standard Program indicated a higher overall level of confidence in their current teaching abilities (29% indicate "High to complete confidence") than other program respondents (average of 15%). This general pattern also held true across each of the 12 teaching roles in the questionnaire.
2. Thirty-seven percent of the SP entrants felt that participating in research projects that focus on teaching or teacher education would be unimportant or questionable sources of professional knowledge, compared to an average of 16% in all other programs.
3. A lower proportion of SP entrants also indicate that "teaching is the only career for me" (32% vs. average of 55% in all other programs).
4. SP entrants who do not plan to teach for more than 10 years are more likely to say that they will leave teaching to change or prepare for a career outside of education.
5. In general, when the data were analyzed as a function of program affiliation, SP participants did not show as many unique groupings as was true of participants in other programs, especially the Heterogeneous Classrooms and Learning Community Programs.

C. GENDER CONTRASTS

Of the total entry population	414 (76.2%) are females and
	129 (23.8%) are males
	<u>2</u> are missing cases
	545

A majority of students in each of the five programs is female. The ratio of females to males was highest in the Learning Community Program and lowest in the Standard Program.

1. Generally, entering females participated in more activities during high school than males. For example: 43% of the females reported moderate to high levels of activity in choir, band, or orchestra. The corresponding figure for males was 28%. Females also report higher levels of "reading for pleasure" (71% vs. 57% for males). Twenty-four percent of the females (vs. 10% of the males) were Sunday School teachers and, 92% of the females vs. 47% of the males are experienced babysitters.
2. Males, on the other hand, report a slightly higher level of participation in interschool athletics/cheerleading (67% vs. 50% for females) and a significantly higher level of participation as a coach of youth sports (40% vs. 21% for females).
3. Post B.A. (total of 78) female candidates outnumber males 2:1.
4. Male/Female percentages in the various majors are as follows:

	<u>Male</u>	<u>Female</u>	<u>N</u>
Special Education	11%	89%	36
Child Development	3%	97%	36
Elementary Education	11%	89%	225
Secondary Education	41%	59%	237
Not planning to earn certificate	20%	80%	5

5. A higher proportion of males than females indicate that they have "high to complete" confidence in current teaching abilities (35% vs. 20% for females).
6. A somewhat larger percentage of males than females (76%) realized they wanted to become teachers after high school (76% vs. 60%).
7. Males who plan to become elementary teachers are more likely to report that they would be most successful teaching science (30%) than is true for females (15%); females are more likely to report that reading (24% vs. 7%) will be their most successful teaching subject.
8. When asked which subject each would feel least successful teaching, males were equally distributed among social studies (26.1%), language arts (26.1%) and science (26.1%); higher proportions of females selected mathematics (32.3%) and science (30.2%).
9. More males (71.3%) than females (55.2%) expect to work more than 10 years as a teacher. And of those who say they will leave the profession within the first 10 years 40% of the females and 60% of the males plan to prepare for a more advanced position in education, 36% of the females expect to leave teaching to raise a family and 23.7% of the males (16.3% of the females) plan to prepare for a career outside of education.

10. Males and females tended to respond in similar ways to the educational belief statements, with the following exceptions:

- A. A higher percentage of females agreed (44% vs. 28% of the males) that "the ultimate criterion in deciding what to include in the curriculum should be: Does this content have practical application in daily living?"
- B. More females than males (49% vs. 31%) agreed that teachers should offer special encouragement to girls to do well in science and mathematics.
- C. The percent of females who agreed that students should have a strong voice in planning classroom activities (40%) is higher than the percent who disagreed (16%). For males, these two figures are reversed. Only 22% agreed with this statement and 31% disagreed.

D. PRE-POST B.A. Contrasts

Among the 545 respondents to the entry questionnaire, 79 or 14% were post B.A. teacher candidates. And most of these, 67 (85%) were enrolled in the Standard Program (three in Academic Learning, two in Heterogeneous Classrooms, and seven in Multiple Perspectives). Thus, post-B.A. candidates represent about 19% of those enrolled in the Standard Program.

Differences in response patterns of post-B.A. and pre-B.A. candidates include the following:

1. A higher proportion of post-B.A. respondents are part-time students (25% enrolled in less than 11 hours of course work vs. 5% for pre-B.A. candidates).
2. Seventy percent of the post-B.A. candidates are enrolled in secondary education compared to 48% of the undergraduates.
3. While 32% of the undergraduates reported that they were required to take a remedial math course, only 15% of the post-B.A. candidates said they were required to do so.
4. Striking differences exists between pre- and post-B.A. candidates in their entering confidence levels. About 50% of the post-B.A. candidates report that they have high to complete confidence that they can now succeed (entry time) as a teacher with no further course work or experience in education. The corresponding figure for pre-B.A. students is 25%. As shown in Table XVII, these differences in self-confidence hold across all of the teaching roles in the survey.

Table XVII.

Percent Who Report "High to Complete"  
Confidence in Their Current Ability  
to Perform Selected Teaching Roles

<u>Teaching Roles</u>	<u>POST B.A.</u>	<u>SECONDARY PRE-B.A.</u>	<u>ELEMENTARY PRE-B.A.</u>	<u>CHI SQUARE df = 3</u>
A. Deciding what content to teach	54%	34%	17%	21.25*
B. Designing lessons, units of study	33%	20%	14%	10.24*
C. Establishing effective working relations with students from diverse cultural/academic backgrounds	46%	43%	34%	6.69
D. Responding appropriately to disruptive pupil behavior	49%	40%	36%	2.34
E. Establishing classroom environment in which students take responsibility for themselves and others in the group	58%	44%	39%	8.60*
F. Applying effective methods of teaching specific subjects such as reading and mathematics	30%	22%	16%	15.72*
G. Providing instruction that addresses individual needs/concerns	37%	29%	23%	3.21
H. Maximizing student understanding of the subject matter	51%	38%	24%	9.32*
I. Motivating students to participate in academic tasks	50%	45%	36%	2.82
J. Assessing student learning and development	28%	25%	25%	6.88
K. Making instructional decisions in a sound and defensible manner	40%	35%	24%	1.97
L. Analyzing and improving your own teaching performance	<u>54%</u>	<u>40%</u>	<u>37%</u>	4.40
MEANS:	44.5%	34%	26%	

\*p ≤ .05

As the Book/Freeman (1986) article noted, entry-level secondary candidates have less previous teaching experience than their elementary counterparts. Yet, secondary candidates have more confidence in their current teaching ability. Post-B.A. candidates show no more or less teaching experience than their pre-B.A. counterparts yet significantly exceed the confidence levels of the pre-B.A. secondary candidates (mean of 44.5% vs. 34% for secondary and 25% for elementary).

- 5. Of those post-B.A. respondents intending to search for a job in Michigan (93% compared to 83% for pre-B.A. candidates) fewer would be willing to leave Michigan for a job in another state (44% vs. 64% of the pre-B.A.'s).
- 6. When asked to describe where teaching fits into their career plans, 96% of the post-B.A. candidates reported teaching is their only or first career choice (vs. 81% of pre-B.A. candidates.)
- 7. A higher proportion of post-B.A. elementary candidates indicated they would be most successful teaching language arts (30% vs. 13% pre-B.A.) and science (39% vs. 14% pre-B.A.).
- 8. Thirty-seven percent of the post-B.A. students prefer to begin their teaching career in a rural school compared to 18% of the pre-B.A. candidates.
- 9. It is axiomatic that post-B.A. students are older than pre-B.A. candidates (83% between 22-30 compared to 23% of the pre-B.A. between 22 and 30 years) and that post-B.A. candidates are employed more hours each week than pre-B.A. students.
- 10. More post-B.A. students disagreed (50%) that middle and high school aged students will make viable decisions about what they need to learn than pre-B.A. students (30%) and fewer Post-B.A. candidates agreed that special efforts should be made to mainstream as many handicapped children into the regular classroom as possible. (51% vs. 66%).
- 11. Finally, a higher proportion of post-B.A. students disagreed that nearly all parents are supportive of teachers and schools (61% vs. 46%).

Appendix I

Responses to Statements Reflecting Four Clusters of Educational Beliefs

1. Teacher Expectations

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<u>Questionnaire Item Number</u>	<u>%A</u>	<u>%D</u>	<u>N</u>
123. Some students do not have the innate ability to learn difficult concepts such as those taught in advanced high school courses in science and mathematics.	52%	30%	538
124. Given the opportunity to choose, middle- and high-school aged students will make viable decisions about what they need to learn.	38%	35%	541
125. School-aged youngsters are capable of learning to accept responsibility for their own actions.	85%	7%	543
130. Students learn more when they work alone than when they work in groups.	5%	63%	540
135. Self-concepts and levels of academic achievement of individual students tend to conform to the expectations of their teachers.	54%	12%	538
136. Within the classroom setting, nearly all students try to be fair, cooperative, and reasonable in the relations with other students and their teacher.	32%	43%	540
138. No matter how hard they and their teachers try, some students who are placed in regular classrooms will never master all of the basic skills in reading and mathematics.	43%	32%	537
143. Schools can reduce racism among students.	71%	9%	539
171. Nearly all parents are supportive of teachers and schools.	22%	51%	535
173. When a teaching strategy works in one class, it is very likely to work in a different class with the same age group, subject, and teacher.	33%	43%	534
174. In all likelihood, an elementary-school student who has outstanding abilities in mathematics also has outstanding abilities in reading and social studies.	14%	61%	536

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Appendix I (continued)

2. Classroom Management/Social Context

	<u>%A</u>	<u>%D</u>	<u>N</u>
126. Special efforts should be made to mainstream as many handicapped children as possible into the regular classroom.	62%	12%	542
127. Learning that is motivated by intrinsic rewards (e.g., needs and interests) is superior to that which is motivated by extrinsic rewards (e.g., grades special awards, privileges).	63%	13%	539
128. One of the most effective ways for teachers to increase motivation is to stimulate competition among students.	18%	57%	539
129. Risk taking and making mistakes are essential components of social, emotional, and intellectual development.	94%	1%	542
131. A variety of face-to-face interaction with individuals from diverse cultures will not necessarily promote understanding and acceptance of those cultures.	39%	40%	536
132. Teachers should establish and enforce clear cut rules for acceptable student behavior	87%	4%	539
133. Teachers should use the same standards in evaluating the work of <u>all</u> students in the class.	34%	43%	540
134. Academic success plays a central role in the development of a healthy self-concept.	70%	7%	539
137. In even the most demanding subject areas, acquisition of academic knowledge is or can be made interesting and appealing to everyone.	76%	14%	540
139. Schools should function as agents to change society rather than as reinforcers of the status quo.	37%	13%	525
140. Exceptional students (e.g., gifted, mentally or physically handicapped) can be best served in special schools or centers.	29%	40%	529
141. Teachers should strive to establish a student-centered classroom rather than a teacher-centered classroom.	77%	4%	531
145. Students who disrupt class activities day after day should be removed from regular classrooms.	24%	45%	537

Appendix I (continued)

	<u>%A</u>	<u>%D</u>	<u>N</u>
146. Parents should have a voice in deciding what content their children will be asked to learn.	41%	23%	537
160. School learning is serious business; it doesn't have to be fun.	5%	88%	539
161. Most students want teachers to assume an authoritative stance in the classroom.	54%	27%	537

**Appendix I (continued)**

**3. Curriculum Planning and Policy**

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	<u>%A</u>	<u>%D</u>	<u>N</u>
142. To provide educational equity, schools must allocate more resources (personnel and finances) to some groups of students than to others.	37%	25%	525
147. In general, teachers' decisions regarding "how to teach" are more important than their decisions of "what to teach."	60%	14%	539
148. Teachers in grades 4-6 should assign at least one hour of homework every night.	41%	26%	538
149. The ultimate criterion in deciding what to include in the curriculum should be: "Does this content have practical application in daily living?"	40%	33%	537
150. When working with students from low income families, teachers should rely primarily on teacher directed, whole group instruction.	8%	45%	529
151. With the exception of specialized programs, all schools in a district ought to teach the same content in a given grade and/or subject.	51%	31%	536
153. Teachers should offer special encouragement to girls to do well in science and mathematics.	41%	26%	533
154. Instructional programs that seek to address interdisciplinary problems or themes (e.g. energy crisis, social equity) are generally superior to those that treat subject matter as isolated disciplines.	38%	13%	536
155. When working with slow learners, teachers should focus nearly all of their instruction on "minimum competency" objectives.	11%	67%	537
156. At least two-thirds of the classes students take in high school should be required courses rather than electives.	65%	16%	537
157. Subject-matter courses should stress the way knowledge is derived in the corresponding academic disciplines (e.g. why statements are or are not accepted as historical facts).	56%	3%	527
158. Because each group of students has a unique set of needs, teachers should develop different instructional objectives for each class.	78%	8%	538

**Appendix I (continued)**

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	<u>%A</u>	<u>%D</u>	<u>N</u>
159. Instead of mixing students with different levels of ability, required high school courses should have separate classes for low achieving and high achieving students.	27%	53%	536
162. Planning for instruction should almost always begin with a systematic diagnosis of student needs.	84%	3%	536
165. When making educational decisions, teachers should rely on what "feels right" instead of "what available information suggests is right" whenever these two sources conflict.	41%	21%	533
169. The development and delivery of a lesson plan should always be guided by a clear statement of what students are expected to learn.	86%	5%	536
170. Students should have a strong voice in planning classroom activities.	36%	20%	536
172. It is fair to regular students for teachers to devote more time and attention to mainstreamed or other exceptional students.	8%	70%	534
175. Students should be required to pass tests in reading, writing, and mathematics in order to graduate from high school.	88%	5%	524

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